

# AQF700 Series

## AC/DC Power Supplies 700W



### KEY FEATURES

- Enclosed ITE Switching Power Supply
- Remote ON/OFF Function
- Standby 5V@1A
- High Efficiency up to 92%
- With P.F.C. Function >0.9
- Ultra Compact Size: 6.7 x 3.66 x 1.61 Inches



### ELECTRICAL SPECIFICATIONS

All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No.		AQF700-12S	AQF700-15S	AQF700-24S	AQF700-28S	AQF700-48S	
Max Output Wattage (W)		Vin:115(V.AC)	600W		675W		
		Vin:230(V.AC)	625W		700W		
Input	Voltage		90-264 VAC				
	Frequency (Hz)		50 / 60 Hz				
	Current (Full load)		<8 A max. (115 VAC) / <3.5 A max. (230 VAC)				
	Inrush Current (<2ms) (Clod Start)		< 55 A max. (115 VAC) / < 90 A max. (230 VAC)				
	Leakage Current		< 0.1 mA max. (Input-Output)				
	Power Factor (at 230 VAC)		PF>0.9 at Full Load				
Output	Voltage (V.DC.)		12V	15V	24V	28V	48V
	Voltage Accuracy		±2%				
	Voltage Adj. Range (V.DC)		±4% Output Voltage				
	Current (A) (max.)	Vin:115(V.AC)	50	40	28.13	24.1	14.06
		Vin:230(V.AC)	52.08	41.66	29.16	25	14.58
	Line Regulation (115-264 VAC)		±0.5%				
	Load Regulation (10-100%) (typ.)		±1%				
	Minimum Load		1%				
	Maximum Capacitive Load		5,000µF	3,750µF	2,500µF	2,000µF	1,250µF
	Ripple & Noise (typ.)		160mV	160mV	240mV	280 mV	480mV
Protection	Efficiency (at 230 VAC)		89%	90%	91%	92%	92%
	Hold-up Time (at 115 VAC)		5 ms min.				
	Over Power Protection		Auto recovery				
Isolation	Over Voltage Protection		Auto recovery				
	Overt Temperature Protection		Auto recovery				
	Short Circuit Protection		Auto recovery or Latch				
Function	Input-Output (V.AC)		4000VAC or 5656VDC				
	Input-PE (V.AC)		2000V				
	Output-PE (V.AC)		1500V				
Function	5V Stand by		5VSB: 5V@1A ; Tolerance ±10%				
	DC OK Signal (Power Good)		Turn ON: 3.7~5.7V ; Turn OFF: 0~1V				
	Remote Control		+RC / -RC: Power ON=open ; Power OFF=short				

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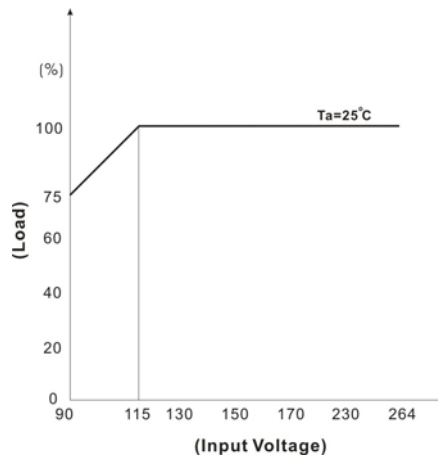
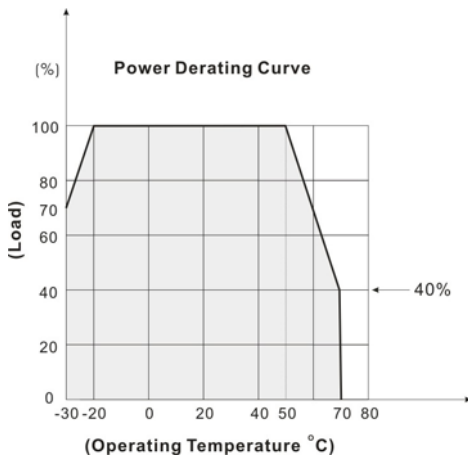
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Model No.		AQF700-12S	AQF700-15S	AQF700-24S	AQF700-28S	AQF700-48S
Environment	Operating Temperature	-30°C...+70°C (with derating)				
	Storage Temperature	-35°C...+85°C				
	Temperature Coefficient	±0.03%/°C ( 0~50°C )				
		±0.06%/°C ( -30~0°C )				
	Altitude During Operation	5000m				
	Humidity	95% RH				
	Atmospheric Pressure	56 kPa to 106 kPa				
	MTBF	>100,000 h @ 25°C (MIL-HDBK-217F)				
Physical	Vibration	10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes.				
	Dimension (L x W x H)	6.7 x 3.66 x 1.61 Inches ( 170.2 x 93.0 x 41.0 mm ) Tolerance ±0.5 mm				
	Weight	In Progress				
Safety	Approval	UL / IEC / EN 62368 (In Progress)				
EMC	Conducted and Radiated EMI	EN55032 / EN55011 (conducted class B, Radiated Class A) (In Progress)				
	EMS	EN55024 / EN60601-1-2 4th edition (In Progress)				

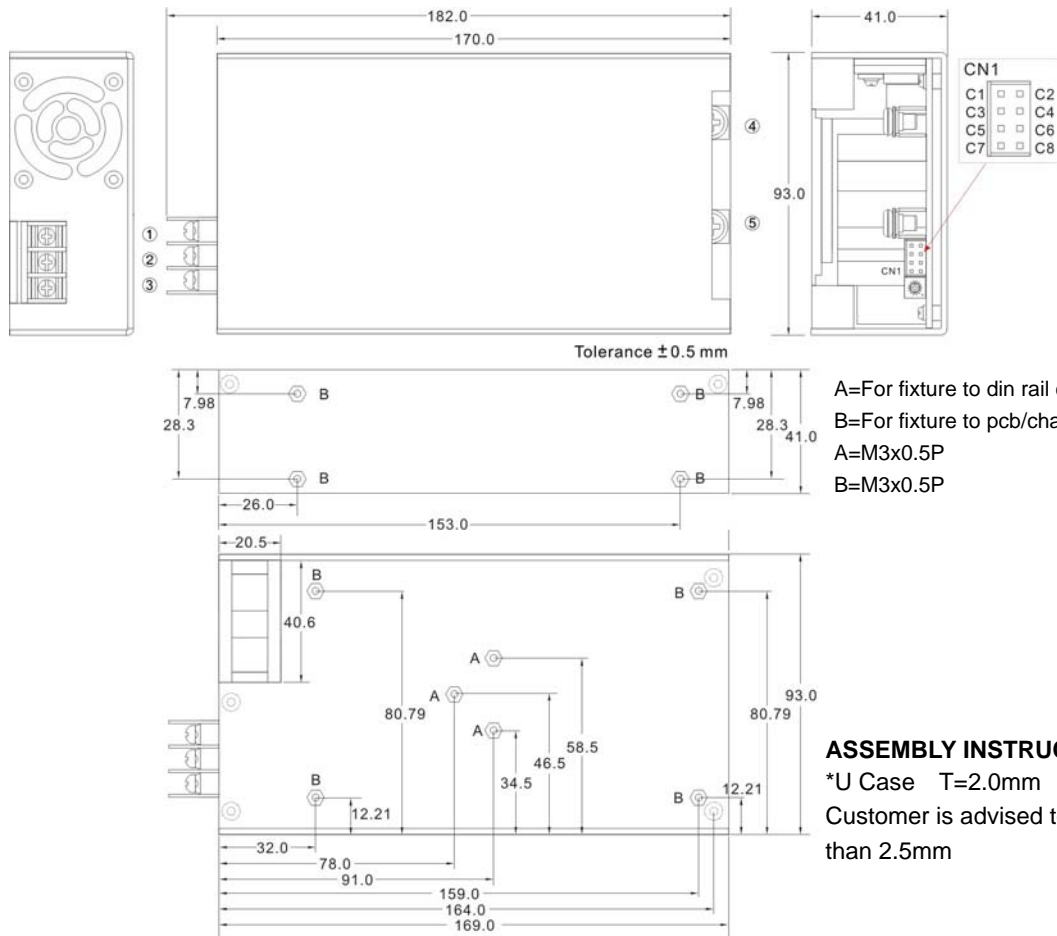
### NOTE

1. Ripple & Noise are measured at 20MHz of bandwidth by using a 6" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
2. Hold-up Time measured at 90% Vout.
3. Strongly recommend to conduct this test with DC Voltage. If customer wishes to test with AC Voltage, please disconnect all Y-Capacitors within Arch power supply.

### DERATING



### MECHANICAL DIMENSION ( Top View )



### ASSEMBLY INSTRUCTIONS

\*U Case T=2.0mm

Customer is advised to screw into the threads no more than 2.5mm

PIN#	Single	Terminal
AC Input Connector Pin		
1	PE	ANYTEK YK-301-3P
2	AC IN (N)	
3	AC IN (L)	
DC Output Connector Pin		
4	+DC OUT	M5 Pan HD screw in 2 positions
5	-DC OUT	Torque to 8 lbs-in(90 cNm) max.

Connector Pin (CN1) = Cherg Weei PHD2.0 - 2x4P			
PIN#	Single	Mating Housing	Terminal
C1	+S	Cherg Weei PHD2.0 - 2x4P or equivalent	Cherg Weei PHD2.0 - 2x4P or equivalent
C2	-S		
C3	NC		
C4	-5V SB		
C5	GND / -RC		
C6	+RC		
C7	PG		
C8	+5V SB		

### FUNCTION DESCRIPITON of CN1

Pin No.	Function	Description
C1	+S	Remote sensing (+)
C2	-S	Remote sensing (-)
C3	NC	
C4	-5V SB	This pin connects to the negative terminal(-V)
C5	GND / -RC	This pin connects to the negative terminal(-V). Return for DC-OK signal output.
C6	+RC	Turns the output on and off by electrical or dry contact between pin C5 (GND / -RC), Short: Power OFF, Open: Power ON.
C7	+PG	DC-OK Signal is a DC output. (DC-OK )
C8	+5V SB	Stand by voltage output ground 4.5~5.5V, referenced to pin C4 or C5(GND). The maximum load current is 1A.

### BLOCK DIAGRAM

